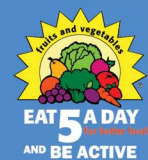


# Policy Brief

September 2004

*Vision: All the people in the Northcoast region value and practice healthy lifestyles.*



## From the Redwoods to the Vineyards:

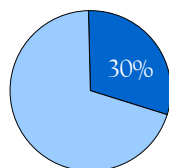
### *North Coast Children on the Brink of a Health Crisis*

The following research study was conducted by the Northcoast Nutrition and Fitness Collaborative, a group of local health, nutrition and community professionals dedicated to creating a healthy environment for residents in the six county region along California's northern coast.

This brief is intended to assist local policymakers, community leaders, parents, school officials and others involved in the welfare of our children to develop responsible plans to address the crisis of unfit and overweight children in the North Coast Region.

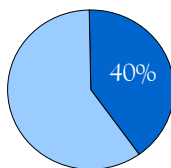
California's beautiful, rugged North Coast region has great opportunities for good nutritious food and outdoor activity. Agriculture, including small family farms, orchards, vineyards, dairy farms and fishing, contribute to the region's economy. Hiking, backpacking and boating are just a few of the many recreational activities available. Ironically, based on collected data and new research by health and education professionals in the six-county North Coast region (Del Norte, Humboldt, Mendocino, Sonoma, Lake and Napa Counties), health promoting foods and physical activity opportunities are not readily available to many families in the region. Among the reasons are poverty, limited access to high quality, affordable fruits and vegetables, lack of safe places for recreation, and limited skills and motivation to adopt a healthy lifestyle. The result is an epidemic of obesity and physical inactivity that will affect the region for decades.

Nearly 30 percent of low-income 2-4 year olds are overweight



Pediatric Nutrition Surveillance System 2002

Nearly 40 percent of 5th, 7th & 9th graders in the North Coast are unfit



California Department of Education Fitnessgram 2002-2003

Over the past 20 years, the North Coast's economy has experienced significant detrimental changes. The substantial decline in the commercial fishing and logging industries, as well as the downturn of the technology sector have left many North Coast residents unemployed, under-employed and/or disenfranchised. More than one quarter of the population lives below 185 percent of the federal poverty level.<sup>1</sup>

On a national and state level, childhood overweight, resulting from poor nutrition and inactivity, has been identified as an epidemic. The North Coast region is not exempt and is experiencing an unprecedented incidence of overweight, unfit children, starting as young as age two.

To better understand how this problem is affecting the North Coast region of California, a broad-based Collaborative looked at existing health data and conducted independent research to understand the role schools play in this crisis.

This brief paints a realistic picture of the situation of overweight, unfit children in the North Coast and some of the contributing economic and environmental factors. As a tool, it is meant to help policymakers, community leaders, school officials, parents and others concerned with the welfare of children develop responsible plans to address the crisis.

## REVIEW OF RESEARCH

Even pre-schoolers show disturbingly high rates of overweight. In all six counties, nearly 30 percent of low-income 2- to 4-year-olds are considered overweight or at risk for overweight.<sup>2</sup>

As children age, the problem intensifies. Nearly 32 percent of middle school children in the region are outside of the Healthy Fitness Zone for body composition.<sup>3,4</sup>

The statistics on physical fitness are even more staggering. Nearly 40

percent of 5<sup>th</sup>, 7<sup>th</sup> and 9<sup>th</sup> graders in the North Coast region failed to pass basic physical fitness tests, according to the 2002-2003 California Physical Fitness Test (Fitnessgram).<sup>5</sup>

Highlighting the ramifications of this situation, research has shown that 50 to 80 percent of overweight teens become obese adults.<sup>6</sup> Additionally, chronic diseases such as type 2 diabetes and coronary heart disease that were once seen only in adults, are now frequently occurring in overweight children.<sup>7</sup> The cost of treating these diseases, as well as other weight-related health conditions, is currently costing California \$7.7 billion annually and is often shouldered at the local level.<sup>8</sup> To address the obesity crisis, we must address these issues.

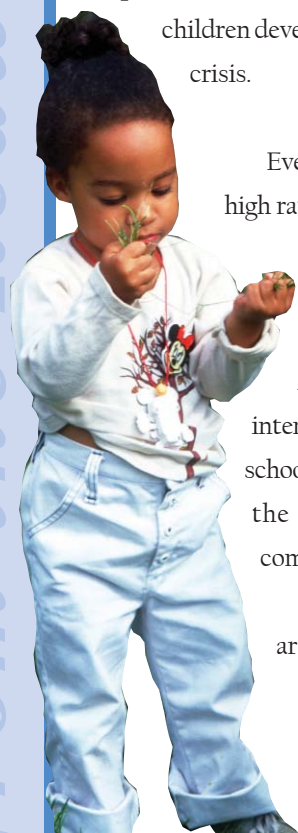
Compounding this situation is the fact that the highest rates of obesity occur among population groups with the highest poverty rates. Poverty and food insecurity (families feeling uncertain where their next meal will come from) are associated with low fruit and vegetable consumption and lower quality diets.<sup>9</sup>

Five of the six counties in the North Coast region have the dubious distinction of being among the six California counties with the highest rates of food insecurity with hunger in the state, according to the 2001 California Health Interview Survey.<sup>10</sup> In four of these counties (Humboldt, Del Norte, Lake and Mendocino), over 50 percent of children aged 0-11 years and approximately 40 percent of children aged 12-17 years live at or below 185 percent of poverty level (a standard used to qualify families for many social services benefits).

## TAKING A CLOSER LOOK

In addition to looking at local and other data, the Northcoast Nutrition and Fitness Collaborative conducted its own independent study.

As a first step, and in light of the important role schools play in children's health, the Collaborative surveyed the nutrition environment in the region's middle schools. Collaborative members personally evaluated half (20) of the North Coast region's middle schools between





April and July 2003. They scored the schools on eight different criteria: the availability of school meal programs, nutritional value of a la carte items and foods sold in vending machines, availability and promotion of soda and other sugar-sweetened beverages. The findings were enlightening!

Ninety-five percent of the region's middle schools had a school breakfast program. This is especially commendable. However, the existence of these programs is not synonymous with their utilization. In fact, less than a quarter of North Coast students are enrolled in the school breakfast program, enrolled meaning that the student's family has met eligibility criteria and the student is signed up to be able to participate, at no cost.<sup>11</sup> Unfortunately, many of these enrolled students do not choose to participate in this program. Of greater concern are the many North Coast families eligible for the meal programs but not enrolled.

All 20 schools had a school lunch program. This is critical because schools may be one of the few places students can be ensured of a nutritious meal. Research shows that students who eat lunches offered through the National School Lunch Program (NSLP) have higher nutrient intakes than do students who make other lunch choices. Forty-seven percent of elementary students in the North Coast region are enrolled in the program, but only 36 percent of middle school and 21 percent of high school students are enrolled, a substantial drop in participation between elementary and high school. Many factors contribute to this situation, including the stigma of school lunch, a la carte choices and open campuses.

Collaborative members analyzed the types of foods available outside of the National Breakfast and Lunch programs and found that three out of four schools sold sugar-sweetened beverages, the consumption of which has been shown to correlate highly with childhood overweight.<sup>12</sup> In 50 percent of the schools surveyed, nearly half of the items sold in vending machines and a la carte

were not even acceptable according to the current federal guidelines set for nutritious foods and snacks. These federal guidelines are more lenient than the updated guidelines recently passed under California Senate Bill SB19.

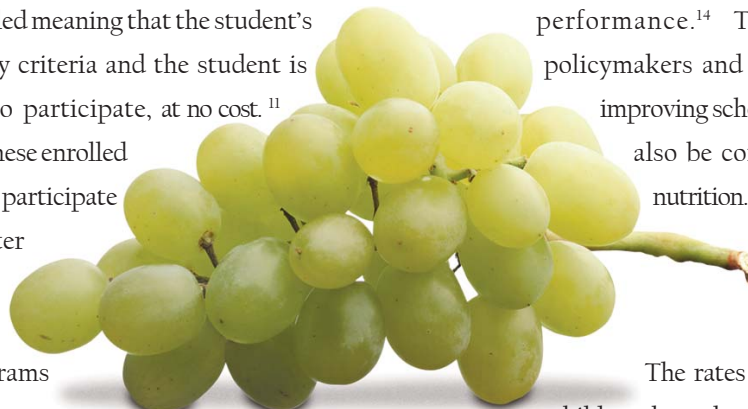
While it is important to appreciate that schools are not the only influence on children's diets, studies have shown that educational institutions, where children spend approximately 40 percent of their waking hours, mold healthy behaviors and diets.<sup>13</sup> Furthermore, there is a positive correlation between good nutrition and academic performance.<sup>14</sup> Therefore, educators, policymakers and others concerned with improving scholastic achievement must also be concerned with students' nutrition.

## CONCLUSIONS

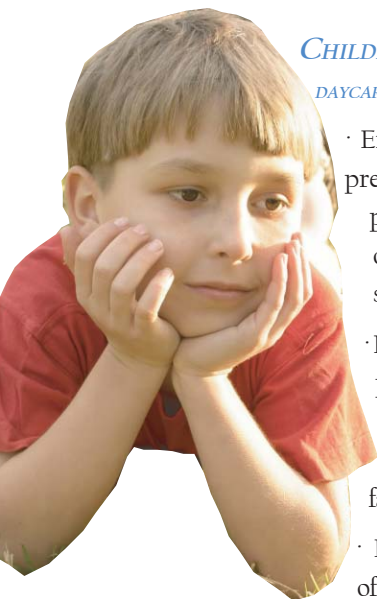
The rates of overweight and unfit children throughout the North Coast region are staggering and the economic situation faced by many North Coast families is desperate.

While there are no simple solutions to this urgent situation, there is also no time to waste. The crisis needs to be addressed from a broad, environmental perspective that includes local and regional policymakers in all levels of government, city planners, school administrators, community leaders, parks and recreation, restaurants, retail food and beverage outlets (e.g. supermarkets and gas station food marts), and other local businesses, as well as parents and other individuals.

To that end, the Northcoast Nutrition and Fitness Collaborative has made the following recommendations:



## RECOMMENDATIONS



### *CHILDRENS' ENVIRONMENTS (SCHOOLS, DAYCARE, AFTERCARE, YOUTH PROGRAMS):*

- Enforce SB 19 nutrient standards in pre-school, school and after-school programs, provide healthy food options and support food service staff in making healthy changes
- Implement active, structured, quality physical education/activity for all age levels, using state time recommendations, with appropriate facilities and equipment for active play
- Eliminate availability and marketing of fast food, junk food and soft drink products from these settings
- Mandate that all drinking fountains be clean and operational
- Provide and promote safe walking and biking routes to school and other key destinations
- Actively promote and market school meal programs
- Enroll all qualified students for free and reduced priced school meals
- Offer all available federally funded food/nutrition programs (breakfast, lunch, after-school snacks and summer foods)
- Allow for increased use of school facilities by the community for physical activity
- Promote and support school gardens and explore local produce purchasing through the Farm to School program

### *PARENTS AND GUARDIANS:*

- Select and prepare healthy foods for your children
- Advocate for safe places for children to get active play
- Join with your children for at least one hour of physical activity every day
- Work with your child's school to promote healthy changes and healthy environments, and/or support food policy committees to advocate for changes
- Advocate for grade specific nutrition education for all levels in schools
- Talk with your children about the benefits of fruits and vegetables and physical activity
- Eat at least one meal each day as a family
- Provide fun-to-eat fruit and vegetable snacks



- Order healthy food options at fast food and other restaurants
- Enroll your children in school food programs (breakfast, lunch, after-school snacks and summer foods)
- Promote and support school gardens
- Enroll in USDA Food Stamp Programs, if eligible

### *LOCAL BUSINESSES:*

- Join with the Northcoast Nutrition and Fitness Collaborative to improve the health of your community
- Donate nutritious foods to food banks, after-school programs and child recreation programs
- Contact the local health department about ways to promote childrens' health in your community
- Provide opportunities for family recreation
- Adopt healthy meeting policies for snacks, meals and physical activity breaks

### *COMMUNITY ORGANIZATIONS:*

- Join with the Northcoast Nutrition and Fitness Collaborative to improve the health of your community
- Open existing recreational facilities for low-income children and families free of cost
- Develop partnerships between city planners, PTAs, schools and land use planning commissions to advocate for safe access to activities and safe routes to school
- Sponsor the summer food program in a low income area
- Offer nutrition education and cooking classes to the community to enable healthy food preparation
- Support access to local sustainably grown fresh foods

### *POLICYMAKERS/LOCAL GOVERNMENT:*

- Work with the Northcoast Nutrition and Fitness Collaborative to identify policy changes that would improve the health of your community
- Increase funding for school meals and physical activity programs
- Direct public funds to improve the availability of affordable nutritious foods, pedestrian and bicycle access, and parks and facilities for active recreation
- Encourage community projects/development that will enable increased physical activity in neighborhoods
- Support comprehensive nutrition and physical education/activity programs in preschools, schools and communities
- Create an advisory panel to offer counsel on issues shaping the overall health of North Coast constituents

# NORTHCOAST COLLABORATIVE PARTNERS

The following organizations share a vision in which everyone in the North Coast communities enjoys an environment that supports healthful eating and physical activity.

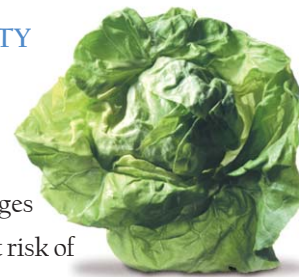
American Cancer Society,  
Humboldt -Del Norte Counties Unit  
American Cancer Society, Mendocino Unit  
Area One Agency on Aging  
Community Action Partnership of Sonoma County  
Del Norte County Unified School District  
Family Action of Sonoma County  
Food for People  
- Humboldt County Food Bank  
- Farm to School Program  
Humboldt Child Care Council  
Humboldt County Department of  
Health and Human Services  
Humboldt County Office of Education  
Humboldt Partnership for Active Living  
Manila Community Services District  
Mendocino County Department of Public Health  
Northcoast Child Nutrition Task Force  
Northcoast Children's Services  
- Head Start/Early Head Start  
(Humboldt & Del Norte Counties)  
Petaluma Health Care District  
Redwood Community Action Agency  
Sonoma County Department of Health Services  
Sonoma County Family Activity and  
Nutrition Task Force  
Ukiah Unified School District  
United Indian Health Services, Inc.  
(Humboldt & Del Norte Counties)

For contact information for any of the  
Collaborative members contact:

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Funded by the U.S. Department of Agriculture Food Stamp  
Program, an equal opportunity provider and employer, through  
California Nutrition Network. For more information about the  
California Food Stamp Program, please call 1-800-952-5253.

## A COUNTY-BY-COUNTY SNAPSHOT OF THE PROBLEM:



### DEL NORTE COUNTY

- 34 percent of low-income children ages 2-4 were classified as overweight or at risk of overweight in 2002<sup>2</sup>
- 63 percent of 5<sup>th</sup> graders were considered physically unfit in 2002-2003<sup>15</sup>
- 38 percent of 9<sup>th</sup> graders were overweight in 2002-2003<sup>15</sup>
- The poverty rate for families with children under age 5 was 37 percent and 24 percent for families with children under age 18, according to the 2000 census

Del Norte County is tied with Humboldt County as the leading county in California for high rates of food insecurity with hunger.<sup>10</sup>

### HUMBOLDT COUNTY

- 35 percent of low-income children ages 2-4 were classified as overweight or at risk of overweight in 2002<sup>2</sup>
- 51 percent of 9<sup>th</sup> graders were physically unfit in 2002-2003<sup>15</sup>
- Over one-third of children in grades 5, 7 and 9 were overweight, according to the 2002-2003 Fitnessgram<sup>15</sup>
- The poverty rate for families with children under 5 years of age was 28 percent and 21 percent for families with children under age 18, according to the 2000 census

Humboldt County is tied with Del Norte County as the leading county in California for high rates of food insecurity with hunger.<sup>10</sup>

### LAKE COUNTY

- 33 percent of low-income children ages 2-4 were classified as overweight or at risk of overweight in 2002<sup>2</sup>
- Almost 47 percent of 5<sup>th</sup> graders were physically unfit in 2002-2003<sup>15</sup>
- Well over one-third of children in grades 5, 7, and 9 were overweight, according to the 2002-2003 Fitnessgram<sup>15</sup>
- The poverty rate for families with children under age 5 was 29 percent and 22 percent for families with children under age 18, according to the 2000 census

Lake County is tied with Mendocino County as 6<sup>th</sup> in California for rates of food insecurity with hunger.<sup>10</sup>





## A COUNTY-BY-COUNTY SNAPSHOT OF THE PROBLEM: (CONT.)



### MENDOCINO COUNTY

- Almost 50 percent of 5<sup>th</sup> graders were unfit, according to the 2002-2003 Fitnessgram<sup>15</sup>
- 35 percent of low-income children ages 2-4 were considered overweight or at risk for overweight<sup>2</sup>
- Almost 40 percent of children ages 5-19 were considered overweight or at risk for overweight in 2002<sup>2</sup>
- The poverty rate for families with children under age 5 was 23 percent and 18 percent for families with children under age 18, according to the 2000 census

Mendocino County is tied with Lake County as 6<sup>th</sup> in California for high rates of food insecurity with hunger.<sup>10</sup>

### NAPA COUNTY

- 31 percent of low-income children ages 2-4 were overweight or at risk for overweight in 2002<sup>2</sup>
- 43 percent of children ages 5-19 were overweight or at risk for overweight in 2002<sup>2</sup>
- 55 percent of 5<sup>th</sup> graders and 51 percent of 9<sup>th</sup> graders were unfit, according to the 2002-2003 Fitnessgram<sup>15</sup>

Napa County is 11<sup>th</sup> in California for rates of food insecurity with hunger.<sup>10</sup>

### SONOMA COUNTY

- 33 percent of low-income children ages 2-4 were overweight or at risk for overweight in 2002<sup>2</sup>
- 40 percent of children ages 5-19 were overweight or at risk for overweight in 2002<sup>15</sup>
- Over 39 percent of 9<sup>th</sup> graders were physically unfit, according to the 2002-2003 Fitnessgram<sup>15</sup>

Sonoma County is 3<sup>rd</sup> in California for high rates of food insecurity with hunger.<sup>10</sup>



- <sup>1</sup> 2000 Census of Population and Housing, Summary File 4, table PCT144: Age by Ratio of Income in 1999 to Poverty Level (All Races/All Ages).
- <sup>2</sup> California Department of Health Services. Pediatric Nutrition Surveillance System 2002. Available at: <<http://www.dhs.ca.gov/pcfh/cms/onlinearchive/pdf/chdp/informationnotices/2003/chdpin03q/table06b.pdf>>. Accessed on November 17, 2003.
- <sup>3</sup> The Northcoast Health Collaborative calculated the regional percentage of 7<sup>th</sup> grade students outside the Healthy Fitness Zone by summing the total number of 7<sup>th</sup> grade students in Del Norte, Humboldt, Lake, Napa, Mendocino, and Sonoma counties who tested outside the Healthy Fitness Zone on the 2002-2003 Body Composition portion of the California Physical Fitness Test and dividing that number by the summed total of 7<sup>th</sup> grade students who were administered the test in 2002-2003 in the same six counties. California Physical Fitness Test data are available at the following link: <<http://data1.cde.ca.gov/dataquest/dataquest.asp>>.
- <sup>4</sup> The definition of the Health Fitness Zone in this policy brief is as described in the Fitnessgram, the standards for which were developed by the Cooper Institute of Aerobics Research. Further description is available at the following link: <[http://data1.cde.ca.gov/dataquest/PhysFitness/gls\\_PFT\\_hfz.htm](http://data1.cde.ca.gov/dataquest/PhysFitness/gls_PFT_hfz.htm)>.
- <sup>5</sup> California Department of Health Services. 1999 California Children's Health Eating and Exercise Practice Survey: Unpublished data. In press: Sacramento, CA.
- <sup>6</sup> Lissau, I. Archives of Pediatrics and Adolescent Medicine. January 2004; vol 158: pp 27-35. News release. Archives of Pediatrics and Adolescent Medicine.
- <sup>7</sup> California Department of Health Services, 1998 California Teen Eating, Exercise, and Nutrition Survey (**Cited in CALTEENS**).
- <sup>8</sup> Finkelstein EA, Fiebelkorn IC, Wang G. State-level estimates of annual medical expenditures attributable to obesity. *Obes Res.* 2004 Jan; 2(1):18-24.
- <sup>9</sup> Drewnowski, Adam and Specter, SE. *Poverty and Obesity: The Role of Energy Density and Energy Costs.* *American Journal of Clinical Nutrition* 2004; 79:6-16.
- <sup>10</sup> Holtby, S., Zahnd, E., Yen, W., Lordi, N., McCain, C., DiSogra, C. *Health of California's Adults, Adolescents, and Children: Findings from CHIS 2001.* Los Angeles, CA: UCLA Center for Health Policy Research, 2004. <<http://www.chis.ucla.edu/>>. Accessed July 15, 2004.
- <sup>11</sup> California Department of Education. School Meal Nutrition Analysis Data 2003-2004. [www.cde.ca.gov](http://www.cde.ca.gov)
- <sup>12</sup> The Lancet, Feb. 2001.
- <sup>13</sup> U.S. Department of Health and Human Services. Guidelines for school health programs to promote lifelong health eating, *Morbidity and Mortality Weekly Report Recommendations and Report* 1996 Jun 14; 45:RR-9.
- <sup>14</sup> Murphy, J.; Pagano, M.; Nachmani, J.; Sperling, P.; Kane, S. and Kleinamn, R. *Archives of Pediatrics and Adolescent Medicine*, September 1998; vol 152 (9): 899-907.
- <sup>15</sup> California Department of Education. 2002-2003 California Physical Fitness Report.